

# **EXHIBIT B**

**Initial Rpt. of S. Friedman**

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

TNT AMUSEMENTS, INC.,  
d/b/a PLAY-MOR COIN-OP,

Plaintiff,

v.

TORCH ELECTRONICS, LLC, *et al.*,

Defendants.

Case No. 4:23-cv-00330-JAR

**EXPERT REPORT OF STACY FRIEDMAN**

**NOVEMBER 6, 2023**

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## I. INTRODUCTION

1. I have been retained by counsel for Plaintiff TNT Amusements, Inc. (“Plaintiff”) in the above-titled litigation between Torch Electronics, LLC, *et al.*, (“Defendants”) and Plaintiff. I understand that Plaintiff has asserted that certain electronic gaming devices distributed by Defendants constitute “gambling devices” and/or “slot machines” as those terms are defined in Missouri Revised Statute § 572.010 (hereafter the “Torch Devices”) and that the Torch Devices are therefore illegal to be possessed or distributed within the State of Missouri.

2. I have been asked to render opinions regarding whether the software design and operation of the Torch Devices involves any of the factual predicates that would bring them within the definition of “gambling devices” and/or “slot machines” under the provisions of Missouri Revised Statutes § 572.010, including, but not limited to:

(1) whether Torch Devices allow a player to stake “something of value” upon the outcome of “a contest of chance,” defined as “any contest, game, gaming scheme or gaming device in which the outcome depends in a material degree upon an element of chance, notwithstanding that the skill of the contestants may also be a factor therein”;

(2) whether the Torch Devices allow a player to stake “something of value” upon the outcome of a “future contingent event not under his control or influence”;

(3) whether the Torch Devices are “usable in the playing phase of any gambling activity, whether that activity consists of gambling between persons or gambling by a person with a machine”;

(4) whether the Torch Devices, “as a result of the insertion of a coin or other object, operate[], either completely automatically or with the aid of some physical act by the player, in such a manner that, depending upon elements of chance, [they] may eject something of value”; and

(5) whether the Torch Devices are “constructed or readily adaptable or convertible” to the use described in (4) above based upon a “mechanical act of manipulation.”

3. I make the following statements based on my own personal knowledge, my experience, and my analysis of the materials I reviewed as set forth below and in Exhibit B to this declaration. I am being compensated at the rate of \$650/hour. In the past four years, I have testified by deposition sixteen times and three times at trial. My compensation is in no way contingent upon my performance, the outcome of this litigation, or any issues involved in or related to this litigation. I am over 21 years of age and am legally competent to testify. If called as a witness, I could and would testify to the following.

## **II. QUALIFICATIONS**

4. I am a professional game designer and casino gaming mathematician intimately familiar with the issues and technology relating to electronic gaming systems, including land-based or Internet casino gaming systems (including, *e.g.*, Class II and Class III games under IGRA, lottery games and video lottery terminals, central determinant gaming systems, sweepstakes games, historical horse race games); mobile, console or PC-based non-wagering game systems; and

other electronic or video arcade games. I have personally designed, implemented, tested, and analyzed many games, including dozens of single-player and multi-player games, both wagering and non-wagering.

5. I am the President of Olympian Gaming, LLC in Lake Oswego, Oregon, a position that I have held since 2001. In that capacity, I have consulted in the gaming industry regarding, among other things, game design and development, slot machine and table game mathematics, game software and hardware development, and gaming patent infringement and validity. I have served as a subject matter expert in many matters related to gaming machines or gaming technology, including over forty cases involving allegations of infringement or misappropriation of gaming-related intellectual property. Many of these cases have involved distributed software systems running on networked computers, and in several of these cases I have performed source code reviews.

6. I have over twenty-five of professional experience in developing regulated casino games, gaming mathematics, and professional software design. My recent CV is provided as Exhibit A to this report.

7. In 1996, I earned my Bachelor of Arts degree in Computer Science, magna cum laude, from Harvard College, Harvard University, Cambridge, Massachusetts. During college, I became familiar with a wider variety of game genres, including RTS or “real time strategy” computer games (specifically

Warcraft: Orcs vs. Humans), CCG or “collectible card games” (specifically Magic: The Gathering), and expanded my knowledge of wagering card games to blackjack, baccarat, and casino poker. After college, I became interested in the mathematics of casino games. I taught myself probability theory—the origins of which are based in wagering games—and began a self-directed study of gaming mathematics, including “advantage play” techniques such as blackjack card counting.

8. My professional experience in the gaming industry started in 1998 when I joined Silicon Gaming in Palo Alto, California as a game model engineer before it was acquired by International Game Technology (“IGT”). Silicon Gaming designed and developed interactive video slot machines. As a game model engineer (i.e., mathematician), I worked on the designs of video slot games, video keno games, and video poker games. I helped produce dozens of innovative new games and engaged regulatory agencies to achieve regulatory approval for the mathematics used in the games. In addition, I designed and developed game flow and storyboards for slot machines, and I developed and shipped mathematical models for over 50 games. I also served as a liaison to state regulatory agencies and corrected prior errors in gaming lab submissions, which led to savings of over \$50,000 in regulatory fees. I was also responsible for managing the statistical verification and mathematical gameplay testing for Silicon Gaming’s products.



9. In 2001, I started an independent casino game design and analysis consultancy, Olympian Gaming LLC. Based on my experience designing, developing, and placing dozens of games in Las Vegas, Reno, and Atlantic City casinos, I advise Internet casino software vendors, new game inventors, and casino game manufacturers in the fields of wagering, gameplay design, mathematical analysis, and statistical verification.

10. Also through Olympian Gaming, I have invented and applied for patents on over two dozen gaming methods and systems and, together with my patent attorney and frequent co-inventor, control a patent portfolio of approximately thirty issued and/or pending patents across several categories of the gaming industry. These innovations include novel table games, electronic wagering games such as slot machine and video poker games, and networked casino management or promotional systems. I have been heavily involved in patent prosecution for many of these patents and have executed several intellectual property transactions including licenses and sales.

11. Olympian Gaming has received regulatory approval for several of its gaming products in multiple jurisdictions, including Nevada, Mississippi, and Washington State. Olympian Gaming also formerly held a distributor license from the Washington State Gambling Commission.

12. In my work as an expert in gaming-related matters, I have been involved with many cases involving regulated electronic gaming machines and systems, including mechanical and video slot machines and the networked casino operations systems to which they are connected. I have also been involved with matters, patents, and software source code relating to Class II games, historical horse racing games, and both electronic instant lottery games and electronic sweepstakes games where sets of predetermined results are delivered to gaming machines from central servers, or are pre-loaded onto gaming machines, and where the results are displayed in a manner that mimics the display of a video slot machine, including a graphical depiction of spinning, symbol-bearing reels. I have also been engaged to perform game design and/or mathematical analyses for such games.

13. I have previously provided analysis and testimony in matters relating to a preview feature. In *Savvy Dog Systems, LLC and POM of Pennsylvania, LLC v. Pennsylvania Coin, LLC and PA Coin Holdings, LLC*, No. 3:19-cv-01470 (M.D. Penn.), asserted U.S. Patent No. 7,735,223 was entitled “Electronic Gaming Method and System Having Preview Screen” and was “directed to a system and method for providing a game preview display to players of an amusement or entertainment electronic game before playing the game.” ’223 patent at 1:64-67. The ’223 patent also taught that “the preview display could also be implemented in

other forms of electronic or electromechanical games. For example, it could be used in the context of an electronic or electromechanical slot machine having a plurality of spinning reels (actual or simulated) and displaying one or more lines of symbols.” ’223 patent at 11:43-48.

### **III. MATERIALS REVIEWED**

14. In forming the opinions I set forth in this report, I relied upon the materials cited in this document as well as the materials set forth in Exhibit B, which I incorporate herein by reference. I have personally reviewed all of the materials cited in this document and therefore have personal knowledge of these materials.

15. In forming my opinions, I have drawn on my many years of education and experience researching, publishing, and working in the fields of gaming, electronic media, and computer science.

16. For any future testimony I may give in this matter, I may use some or all of the documents and information cited to, referred to, or identified in this report, as well as any additional materials that are entered into evidence or produced in discovery in this matter.

17. My work on this matter is ongoing. As I examine additional materials and perform further analyses on current information, I reserve the right to revise and supplement my opinions and this report.

#### **A. Related Opinions**

18. On May 5, 2023, I submitted a declaration in this matter in support of TNT's request for a hearing on its motion for a preliminary injunction. I incorporate by reference those prior opinions herein, as if fully set forth herein.

#### **IV. LEGAL STANDARDS**

19. In connection with my analysis, I have reviewed Missouri Revised Statute § 572.010, which provides several definitions for several terms pertinent to my analysis. While I am not an attorney and do not claim the expertise necessary to make the ultimate legal conclusion as to whether the possession or use of the Torch Devices is illegal under Missouri law, I do possess the expertise necessary to determine whether the Torch Devices satisfy certain factual predicates contained in the statutory definition of "gambling device" and "slot machine" under Missouri Revised Statute § 572.010, as well as certain other terms defined in that statute.

20. I understand that paragraph 4 of Missouri Revised Statute § 572.010 defines "gambling" as follows:

**"Gambling"**, a person engages in gambling when he or she stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under his or her control or influence, upon an agreement or understanding that he or she will receive something of value in the event of a certain outcome. Gambling does not include bona fide business transactions valid under the law of contracts, including but not limited to contracts for the purchase or sale at a future date of securities or commodities, and agreements to compensate for loss caused by the happening of chance, including but not limited to contracts of indemnity or guaranty and life, health or accident insurance; nor does gambling include

playing an amusement device that confers only an immediate right of replay not exchangeable for something of value. Gambling does not include any licensed activity, or persons participating in such games which are covered by sections 313.800 to 313.840[.]

21. I understand that paragraph 3 of that same statute defines “contest of chance” as follows:

**“Contest of chance”**, any contest, game, gaming scheme or gaming device in which the outcome depends in a material degree upon an element of chance, notwithstanding that the skill of the contestants may also be a factor therein[.]

22. I understand that paragraph 12 of that same statute defines “something of value” as follows:

**“Something of value”**, any money or property, any token, object or article exchangeable for money or property, or any form of credit or promise directly or indirectly contemplating transfer of money or property or of any interest therein or involving extension of a service, entertainment or a privilege of playing at a game or scheme without charge[.]

23. I understand that paragraph 11 of that same statute defines “slot machine” as follows:

**“Slot machine”**, a gambling device that as a result of the insertion of a coin or other object operates, either completely automatically or with the aid of some physical act by the player, in such a manner that, depending upon elements of chance, it may eject something of value. A device so constructed or readily adaptable or convertible to such use is no less a slot machine because it is not in working order or because some mechanical act of manipulation or repair is required to accomplish its adaptation, conversion or workability. Nor is it any less a slot machine because apart from its use or adaptability as such it may also sell or deliver something of value on a basis other than chance[.]

## **V. TECHNOLOGY BACKGROUND**

### **A. History of Gambling and Gaming Mathematics**

24. Games involving elements of chance date back thousands of years.

Archaeologists have uncovered dice in Persia dating back approximately 5000 years.<sup>1</sup> Playing cards date back to 9<sup>th</sup> century CE China.<sup>2</sup> But it was not until the mid-1600s that probability theory was formalized by Blaise Pascal and Pierre de Fermat in a series of letters related to the Problem of Points, or how to split the stakes in an interrupted game.<sup>3</sup>

25. Randomly drawing or casting lots to determine outcomes or make decisions also dates back to ancient times. The biblical story of Esther, dating to approximately 5<sup>th</sup> century BCE, is the origin of the Jewish holiday of Purim, a story in which casting lots takes a central role.<sup>4</sup> Drawing or casting “lots” is also the origin of the word “lottery.” Lotteries and raffles were foundational in early American history, including a lottery to raise \$1M to fund the Continental Army under George Washington in 1777.<sup>5</sup>

26. The legal definitions of “lottery” or “gambling” tend to vary by jurisdiction, especially in the United States where each state can have different

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<sup>1</sup> Exhibit 1.

<sup>2</sup> Exhibit 2.

<sup>3</sup> Exhibit 3.

<sup>4</sup> See Esther 3:7; the name Purim literally means “lots” in Hebrew.

<sup>5</sup> Exhibit 4. Also, my first-year dormitory at Harvard, Stoughton Hall, was constructed using proceeds from a private lottery. See Exhibit 5.

laws and regulatory structures around gambling. For example, when evaluating whether a particular machine is a “gambling device” or “slot machine” as relates to the “element of chance,” some states make no distinction between the relative amount of chance vs. skill in their definitions,<sup>6</sup> some states use a “predominance” or “dominant factor” test, and some states use a “material element” or “material degree” test.<sup>7</sup> As noted above, Missouri uses a material degree test.

27. In their letters, Pascal and Fermat first formalized the mathematical concept of Expected Value or EV. For example, the EV of a fair coin flipping game, if the player stakes \$1 to receive \$2 on heads and \$0 on tails, is  $(\$2 * 50\%) + (\$0 * 50\%) = \$1$ . In other words, the player’s expected result of \$1 is equal to their \$1 stake, so they neither expect to win nor lose on average (i.e., it is a fair game). For another example, the EV of game in which the player pays \$1 to pull a card from a shuffled standard deck and receives \$3 if the suit of the card is hearts but loses for any other suit is  $(\$3 * 1/4) + (\$0 * 3/4) = \$0.75$ . In other words, for every \$1 wager in that game, the player only expects to receive \$0.75, which

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<sup>6</sup> Nevada Revised Statutes 463.0191 “Slot Machine” defined. “Slot machine” means any mechanical, electrical or other device, contrivance or machine which, upon insertion of a coin, token or similar object, or upon payment of any consideration, is available to play or operate, the play or operation of which, *whether by reason of the skill of the operator in playing a gambling game which is presented for play by the machine or application of the element of chance, or both*, may deliver or entitle the person playing or operating the machine to receive cash, premiums, merchandise, tokens or any thing of value, whether the payoff is made automatically from the machine or in any other manner; NRS 463.0152 “Game” and “gambling game” defined. 1. “Game” or “*gambling game*” means any game played with cards, dice, equipment or any mechanical or electronic device or machine for money, property, checks, credit or any representative of value... (emphasis added)

<sup>7</sup> Exhibit 6 at 390-394.

means they expect to lose \$0.25. The word “expected” is used because it refers to a mean or average value, not any particular actual value that may be realized. For example, it is not possible in this card game to actually lose 25 cents (the only two possible outcomes from a stake of \$1 are receiving \$3 or \$0) but a loss of 25 cents is the average over all four possible suits in the deck.

28. Mathematically, games of chance can be generally categorized into two broad groups: those involving random, independent trials and those involving some measure of dependence between games. Roulette and dice games, and most slot machine games, are games where prior results are entirely independent from the next game play and cannot affect it. Many card games and instant lottery or pull-tab games, on the other hand, involve selecting shuffled elements from a larger set without replacing them, and therefore the next game (and selection) is made from a different distribution of elements than the prior games. For example, card counting in blackjack is based on the fact that as hands are played, knowledge of the cards that have already been dealt can provide information about the cards that remain in the deck, and savvy bettors can adjust their wagers accordingly, sometimes achieving a theoretical advantage over the house. Similarly, many pull-tab games advertise which larger prizes have already been claimed from the set of tickets as the game progresses, giving bettors insight into which larger prizes remain.



29. Some gaming jurisdictions allow electronic gaming machines like slot machines to be played using an internal random number generator (RNG) that produces independent game outcomes, while others require gaming machine results to be based on a finite, depleting pool of virtual tickets. Randomly sampling an RNG-based game and recording the outcomes is a well-known technique for generating a finite pool of outcomes for those jurisdictions that require them. In that way, gaming machine vendors have been able to convert pre-existing gaming machines from RNG jurisdictions (e.g., Las Vegas slot machines) to finite pool jurisdictions (e.g., New York VLTs). It is also possible to mathematically convert any finite-pool based game to a game of independent trials by randomly selecting from the entire pool each play, without discarding the previously-selected outcomes.

## **B. Gaming<sup>8</sup> Machines**

30. The history of the slot machine dates to the late 19<sup>th</sup> century when Charles Fey developed the Liberty Bell, a purely mechanical device; the name “slot machine” itself is a shortening of “nickel-in-the-slot” machine, a description of how one initiated the play.

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<sup>8</sup> In modern parlance, “gaming” can sometimes refer to video or computer games, but the historical meaning of “gaming” relates to gambling or wagering. In this report, the phrases “gaming machine” and “electronic gaming machine” (EGM) refer to machines, including slot machines, that are used for gambling (as opposed to, for instance, a Playstation or Xbox).

31. Historical slot games and most modern slot machines share several basic behaviors. First and foremost they share the ability to make wagers. In traditional slot machines found in casinos, facilities for depositing funds include a coin slot, a bill acceptor, and a ticket reader. Any of those will register the amount on a credit meter to be used for wagering. Once credits have been loaded onto the machine, the player initiates a wager by pulling a handle or pressing a “bet” button. Slot machines commonly involve three or more spinning reels, where each reel contains images of different graphical symbols such as sevens, cherries, or bars in a particular order. The reels are set in motion (either physically, or in the case of a video slot machine, using computer animation) and when they come to rest, the symbols lining up on the designated “payline” are checked against the preestablished winning symbol combinations. The player can see which winning combinations result in various payouts by referencing a “pay schedule,” “paytable,” or “award schedule.” If a winning symbol combination is achieved by the player, the associated payout is credited or paid to the player. Some symbols function as wildcards or “wild” symbols and can substitute for other symbols to complete a winning combination. When a player is finished playing and has any credits left, a cash-out functionality may distribute currency, print a paper ticket redeemable for cash at a kiosk or teller window, or otherwise dispense the credits to the player.

32. While historical slot machines were mechanical devices, modern slot machines are essentially computers with input and output devices added to them appropriate for a gaming environment rather than (for example) an office environment. In many modern slot machines, the motion of the reels is determined not by mechanical principles as it was in historical slot machines like the Liberty Bell, but by a computerized “random number generator” (“RNG”) that uses a mathematical function to produce a sequence of highly unpredictable numbers. The numeric output of the RNG is converted into a number that represents a position on that reel, and the symbol(s) at and near that position will be displayed, either physically (by a computer-controlled stepper motor that moves the reels) or via animation on a video screen. The frequency and distribution of the symbols on the reels, as well as the winning combinations and awards in the pay schedule, are developed and calculated by “game designers” like myself into what is known as a “game model,” which is sometimes a spreadsheet with the appropriate calculations. The arrangement and ordering of the symbols on a given reel is known as a “reel strip,” after the physical strips of plastic or paper affixed to the circumference of mechanical reels. In most video slot games, numeric references to the symbols (rather than the graphical images themselves, which are much larger) are arranged onto in-memory electronic representations called virtual reels and are virtually

“spun” in memory, allowing similar game logic to operate both a display with a video animation of reels and a display with physical, mechanically driven reels.

33. Gaming machines that look and feel like slot machines are not always based on randomly-spinning, symbol-bearing reels. Slot machine gambling is a very popular form of gambling in the United States, and in many jurisdictions where slot machines are illegal but other forms of gambling are not, creative game developers have been able to adapt those other forms of gambling into the look and feel of a slot machine. For example, the 1988 Indian Gaming Regulatory Act defined three classes of gaming that may be operated on tribal lands. Class I is ceremonial or social for minimal prizes; Class II relates to bingo (including electronic aids) but expressly excludes slot machines; and Class III is everything that isn’t Class I or Class II (including slot machines); only Class III gaming requires a tribal-state compact. Notwithstanding, the majority of Class II games found in tribal casinos look very much like slot machines because, though behind the scenes there is an approved game of bingo happening, the look and feel of a Class II machine is designed to mimic a slot machine. A bingo ball draw is conducted for a network of machines, and the game’s software generates a “façade” or “entertaining display” of spinning slot machine reels and paylines that displays the bingo result as a slot machine outcome.

34. Similarly, in Washington State tribal lottery locations and in the New York State Lottery system, video gaming terminals retrieve numeric electronic pull-tab results from remote computers holding finite pools of predetermined plays. Unlike slot machines that generate results randomly each spin (and can therefore randomly produce periods of very high or very low financial returns), lottery style games such as pull-tabs, scratch tickets, and other finite-pool game types have known, predetermined quantities of winners and losers in each finite pool and therefore the exact mathematical properties of each finite pool can be calculated in advance. Some gaming operators use finite pool machines that create the pools internally, while others use finite pools created by an outside computer where plays are sent to each machine. A game is called a “central-determinant” game when its result is received from (or determined at) a remote location rather than generated internally. When a central-determinant game terminal receives its result, it typically displays that result in the form of a slot machine outcome by spinning the reels and generating symbol combinations to match the desired result received from the network. This process is essentially reversed compared to a normal slot machine game: in a typical slot machine, the reels spin randomly and the game’s result is determined by the particular combination of symbols randomly generated by the reels. In contrast, central-determinant games, the externally-determined result is determined first (either long in advance or at the moment it is requested),

then received by the gaming machine, and then the reels spin and stop to display the received result. This reverse technique of starting with a game result and spinning slot machine reels to match that result was known at least as early as 1989 and was described by U.S. Patent No. 4,817,951.<sup>9</sup> In some jurisdictions where slot machines are not allowed but sweepstakes or promotional games are, certain vendors market their products as fully-compliant sweepstakes or promotional products with an “entertaining display” that looks like a slot machine game.

35. Almost all electronic gaming machines, whether the outcomes are determined by an internal RNG, received from a central-determinant system, or some other technique, offer the operator multiple different return-to-player (“RTP”), a.k.a. payback percentages. Each payback percentage represents the theoretical average return for a different outcome distribution for the game. For example, a slot machine may come pre-programmed with four different payback percentages such as 97%, 94%, 91% and 88%, based on four different mathematical outcome distributions or “math models.”<sup>10</sup> A slot floor full of games with 97% RTP would, for \$10,000 in total wagers, be mathematically expected to return \$9,700 to players as prizes, keeping \$300 for the house, while machines with 94% RTP would expect to keep twice as much for the same \$10,000 in

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<sup>9</sup> Exhibit 7, see Fig. 4, numerals 108 through 112.

<sup>10</sup> A math model includes the value (payout) of each possible outcome in a game and the probability (chance) of each, and the RTP of the game is the summation over all value \* probability. The job of a slot machine mathematician is to produce these math models; I started doing this work over 25 years ago.

wagering volume. The actual results after \$10,000 may vary depending on a number of factors, including the variance of the random distribution on which each game is based.

36. All games that use finite pools of predetermined plays (known by several names including instant lotteries, break-opens, pull-tabs, sweepstakes, pool games, and scratchers) are mathematically equivalent in that there is a known distribution of predetermined winners and losers, i.e., a known quantity of winning prizes for each available prize value and a known quantity of losing tickets (zero-value prizes) that form the pool. (This is not to say that the prize distribution itself is equal across all pool-based games; the specific prize type, amount and frequency details are up to the game designer). Gambling author John Scarne included a chapter in his 1974 book *Scarne's New Complete Guide To Gambling* entitled "Lotteries, Sweepstakes, Pools and Raffles."<sup>11</sup> It notes that many early American development projects were funded by lotteries, including building dormitories at Harvard.<sup>12</sup> It also notes many illegal, unregulated lottery games operated by "crooks, confidence men and cheats who did a booming business" and "called their lotteries by other names: Keno, raffles, pools, sweepstakes and the like."<sup>13</sup>

Regardless of the name used, each finite pool game has a predetermined total

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<sup>11</sup> Exhibit 8.

<sup>12</sup> Exhibit 8 at 150-151.

<sup>13</sup> Exhibit 8 at 155-156.

payout, which in the usual case is less than the total amount of sales for all the tickets, leading to a predetermined profit for the operator. This predetermined-profit property of finite pool games is sometimes preferred by gaming operators (and/or required by regulators) when compared to slot machines or other casino-style games (e.g., blackjack or roulette) where game results are randomly and independently determined in real time and the total payout of any given number of plays is not known in advance. Games of random, independent trials such as slot machines can lead to a financial loss for the operators when players are lucky. Finite pool games are designed to eliminate the possibility of a financial loss because the pool has a predetermined total payout that is less than the total sales, assuming the operator actually sells all the tickets.

**C. Preview / Pre-Reveal / No Chance Features**

37. As noted above, many state laws define “gambling” to include a game which involves an element of “chance.” Previously, game designers seeking to avoid the application of state gambling laws have developed gimmicks that, they argued, eliminated the element of chance and thereby ostensibly set their products outside the purview of gambling laws.

38. Efforts to design products with “no chance” so as to evade gambling laws stretch back over a century. For example as early as 1912 mechanical slot machine manufacturers used the “future pay” or “deferred” concept, in which the



player knew in advance of each play whether they would win or lose. A book by Marshall Fey<sup>14</sup> (the grandson of Charles Fey, the inventor of the slot machine), describes the “future pay” concept as a “ruse devised to pass off slot machines as non-gambling devices:”

The *future pay*, or *deferred* concept, introduced in 1912 and used on slots through the 1920’s was among the cleverest and most successful ruses devised to pass off slot machines as non-gambling devices. The player knew in advance of each play if he would win or lose on the next handle pull, thus theoretically, eliminating the element of chance.<sup>15</sup>

39. The Fey book describes how, when a win was obtained, the Future Pay feature would hold the winning tokens until the next play instead of dispensing them immediately as was (and still is) typical for gaming machines. The amount of held tokens was then displayed on a sliding mechanical display indicating the number of coins to be dispensed on the following play. In other words, the player was essentially always paying for one game in advance because they had to pay for a second game in order to receive the first game’s winnings. The first game’s winnings were therefore *deferred* to the *future*.

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<sup>14</sup> Exhibit 9.

<sup>15</sup> Exhibit 9 at 161.

Jennings 1918 AUTOMATIC  
COUNTER VENDER  
with Future Pay



## Future Pay



When three shields of a similar color are lined up on the payline, the Future Pay Display, below, will rotate to inform the player of the number of tokens he is to receive on the following play.

**TO-DAY 12 Amusement Tokens**  
with this purchase

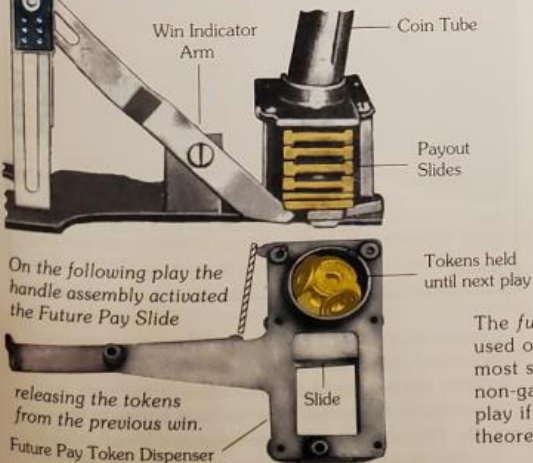
In addition, to appear less like a gambling device, the TODAY VENDER utilized a cabinet, with four tall columns of mints built in, which concealed the reels when the slot was viewed from a distance.

Jennings  
1926  
TODAY  
VENDER  
with  
Future  
Pay



20  
16  
12  
8  
4  
2  
NO  
Future Pay Display

When a win was obtained, the appropriate slide or slides would drop back allowing the Win Indicator Arm to rotate past the released slides, which in turn, lowered the Future Pay Display to show the number of tokens to be paid on the next play. Simultaneously, the tokens won were dropped from the slides into the cup in the Future Pay Token Dispenser located below the base plate.



The future pay, or deferred concept, introduced in 1912 and used on slots through the 1920's was among the cleverest and most successful ruses devised to pass off slot machines as non-gambling devices. The player knew in advance of each play if he would win or lose on the next handle pull, thus theoretically, eliminating the element of chance.

40. The Fey book also described another game, ostensibly involving skill, as a “sham to circumvent the law:”

When a slot machine is classified as a game of skill, it is technically no longer a gambling device, although the application of skill was actually negligible and had little or no influence on the end result. In order for the Hoke SNAKE machine to pay, the player had to flip a steel ball into the open mouth of the snake located at the top of the machine. As very little expertise was required for this feat, it was actually a sham to circumvent the law.<sup>16</sup>

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<sup>16</sup> Exhibit 9 at 164.

## A Game of Skill???

Dixie 1934  
DIXIE BELL

Hoke 1939  
SNAKE



Located beneath the reels, the skill buttons were cleverly called reel controls, giving the player the option to stop any or all of the three reels by pressing the appropriate buttons. This trade stimulator was produced and patented by Dixie Manufacturing Company of Portland, Oregon.



When a slot machine is classified as a game of skill, it is technically no longer a gambling device, although the application of skill was actually negligible and had little or no influence on the end result. In order for the Hoke SNAKE machine to pay, the player had to flip a steel ball into the open mouth of the snake located at the top of the machine. As very little expertise was required for this feat, it was actually a sham to circumvent the law. This special skill feature, patented by Harry Hoke, Jr., was adapted to some revamped Mills FUTURITY machines.

Skill buttons, used to manually control the reels, were an option on bell slots from the late twenties until the mid-thirties. Although they did little to improve the odds, they gave the player something else to do besides pulling the handle.



41. As noted earlier, games involving a preview feature<sup>17</sup> have been involved in prior litigation. For example, I was involved as a technical expert in relation to U.S. Patent No. 7,735,223 entitled “Electronic Gaming Method and System Having Preview Screen.” I am also aware of several other cases involving gaming machines characterized as “preview,” “no chance” or “pre-reveal” that involve similar game features, including those listed in the Complaint in this matter.

42. In addition, I have also reviewed a number of court decisions addressing the legality of devices involving a “preview,” “no chance,” or “pre-reveal” feature under their own state laws. For example, in *Gator Coin II, Inc. v. Florida. Department of Business and Professional Regulation*, a Florida court discussed a particular device’s “preview” feature as follows:

While it is true that the user is advised of the outcome of the game at hand ahead of time through the preview feature, the user cannot predict that outcome until it is randomly generated and then displayed by the machine. Nor can the user predict the outcome of Game 2 while playing Game 1. ... [The] definition of slot machine is satisfied regardless of when the outcome is generated or when it is made known to the user, and nothing in the statute requires that each game be analyzed in isolation without considering its relationship to subsequent games.

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<sup>17</sup> In this report, a “preview feature” means a game feature like the antique Future Pay concept wherein “the player knew in advance of each play if he would win or lose on the next handle pull,” or an optional implementation thereof.

43. The *Gator Coin* court went on to find that the device was illegal under Florida law.

44. Similarly, in *Mayle Bingo Co., L.L.C. v. Ohio Department of Pub. Safety*, an Ohio court described a device's "mandatory preview feature" in a game involving a pseudo-random number generator as a "façade" intended to "take an otherwise illegal game outside of the scope of" Ohio's gambling laws. The Ohio court explained the operation of the game as follows:

Although the player may still proceed to play despite seeing that he or she will not win the next play based on the mandatory preview, the reason the player proceeds to play despite knowing the negative outcome for the next play is that the player hopes to obtain a positive gain in the play after the negative play. The goal of playing the game is to seek an overall gain at the conclusion of play, even though the immediately next play may be known to have a negative outcome. It is this hope of an overall gain that initially attracts the player to [the game].

45. The Ohio court went on to reject the contention that the game's preview feature made it a "no chance" game:

Furthermore, the fact the outcome of the next play is revealed after a player activates the mandatory preview function does not render the game a "no-chance" game, as appellants claim. Game play technically commences the moment the player interacts with the game and activates the preview function. It is only after this initial engagement with the game that the outcome is revealed. Chance pre-exists the revelation of the outcome and resides in the window between the time the player first engages the game and when the outcome of the next play is revealed through the mandatory preview function. A player activates the mandatory preview hoping for a gain, and the outcome is largely determined by chance. Thus, we reject this "no-chance" argument.

46. Similarly, in *Gracie Technologies, Inc. v. Commonwealth of Pennsylvania*, a Pennsylvania appellate court, affirming the trial court, held that a game involving the generation of outcomes from a finite pool was a gambling game. Notably, Torch’s designated expert in this case, Nick Farley, testified in support of the notion that the game’s “prize viewer” feature made it a game of skill under Pennsylvania law because it required the player to “develop[] the skill of ‘shop[ping] for the best possible outcome.’” The court ultimately rejected that argument. The court stated:

This Court cannot ignore the reality that chance ultimately determines losing outcomes, winning outcomes, and the different prize levels: which are programmed into the [machine’s] finite pool for random sequential delivery. Furthermore, this Court cannot overlook the fact that there is no level of skill a player can employ to change the predetermined outcome or predetermined valued prize. . . . [A] large random element is always present, and it predominates.

47. Most recently, in the 2022 case of *Gift Surplus, LLC v. State of North Carolina*, the Supreme Court of North Carolina found that a game that was devised so that players could only compete for the top prize 25% of the turns was predominantly a game of chance and therefore illegal under North Carolina law, despite claims that the outcome of the game depended in some degree on the skill of the player.

48. Although it appears that the foregoing cases demonstrate a judicial recognition that gaming devices that are similar in many respects to the Torch

Devices involve an element of chance and/or a wager on a future contingent event outside the control of the player, I have not relied upon those specific decisions in reaching my conclusions. Instead, I provide the conclusions below on the basis of my understanding of the terms “gambling,” “gambling device” and “slot machine” as those terms are defined in Missouri law.

## **VI. DISCUSSION**

49. Based upon my review of documents filed in court by each of the parties in this case, I understand that among the main disputes between the parties is whether the Torch Devices either involve an element of chance or other future contingent event outside the control of the player, such that they might plausibly be thought to meet the definition of “gambling device” or “slot machine” under Missouri law.

### **A. Basic Principles**

50. The definition of gambling in Missouri involves a player “staking or risking something of value” upon either “the outcome of a contest of chance” or a “future contingent event not under [the player’s] control or influence.” Contest of chance is defined to include a contest or game in which the outcome “depends in a material degree upon an element of chance.”



51. The definition of gambling in Missouri also involves “an agreement or understanding that [the player] will receive something of value in the event of a certain outcome.”

52. Thus, the definition of gambling in Missouri relates to activities in which the “something of value” that the player stakes or risks may – but may not – result in receiving something of value depending on what happens, either in a contest of chance or a future contingent event.

53. “Something of value” is also defined in Missouri as

any money or property, any token, object or article exchangeable for money or property, or any form of credit or promise directly or indirectly contemplating transfer of money or property or of any interest therein or involving extension of a service, entertainment or a privilege of playing at a game or scheme without charge.

Mo. Rev. Stat. § 572.010(12).

54. Notably, that definition does not require “something of value” to have a fixed or known value. For example, “property” is “something of value” under Missouri law, but the value of certain forms of property can be highly subjective. Similarly, in a casino setting, a \$10 free-bet coupon is an example of “extension of a privilege of playing at a game without charge” and is therefore something of value. It is well known that free-bet coupons cannot be cashed in directly but must be used, as the name indicates, to make a free bet for the value indicated. But because different casino games have different theoretical paybacks, the expected

value of a \$10 free-bet coupon depends on which game the player chooses to play (e.g., a \$10 free-bet coupon has an expected value of \$9.87 when wagered on the player bet in baccarat, \$9.47 when wagered on Red in roulette, and \$8.33 when wagered on the Any Seven bet in craps). Therefore the free-bet coupon itself is something of value (even before it is used) because it represents a potential win with a positive expected value even though the result is as yet unknown. The actual result of a free-bet coupon (after using it) may be a loser, but it may also be a winner.

**B. Description of the Torch Devices**

55. I have reviewed several sources of evidence as to the operations of the Torch Devices. These sources include:

- a. The Transcript of Preliminary Hearing Held on April 22, 2022 in State of Missouri vs. Ijaz Hussain and filed with the Court as Doc. 21-17 on May 1, 2023 (“Prelim. Tr.”);
- b. The Declaration of Nick Farley dated April 27, 2023 and filed with the Court as Doc. 21-14 on May 1, 2023 (“Farley Decl.”);
- c. Defendants’ Opposition to Plaintiffs’ Request for Oral Argument on Plaintiff’s Motion for Preliminary Injunction, filed as Doc. 26 on May 10, 2023;

d. Defendants' Answer and Affirmative Defenses to Plaintiffs'

Complaint and Counterclaims, filed with the Court as Doc 44 on September 13, 2023 ("Answer");

e. Deposition Transcript of James Horrom, Tim McGrail, and

Cody Hanavan, Corporate Designees for the Missouri Gaming Commission, Monday, July 10, 2023 in *Torch Electronics,*

*LLC, et al. v. Missouri Department of Public Safety, et al.* Case No: 21AC-CC00044 ("MGC Tr.");

56. According to these sources, the Torch Devices involve the following functionality:

a. The player can "place money in the machine" and "initiate

game play," including "spin some reels," Farley Decl. ¶¶ 5, 6, MGC Tr. at 23:5-9.

b. The outcome of a game can be a loser or winner and award a

prize. MGC Tr. at 23:5-9, Farley Decl. ¶ 8.

c. The player can "win money" and "redeem their credit balance"

a.k.a. "cash out." Farley Decl. ¶ 5, Answer ¶ 44.

d. Each game result (prize amount) is sequentially selected from a

finite pool of predetermined game results. Farley Decl. ¶¶ 7, 8, Answer ¶ 47, MGC Tr. at 23:21-23.

- e. The player does not know the location of the next result in the predetermined finite sequence. MGC Tr. at 115:5-116:7.
- f. Each game result is selected before the player pays for a game, and the Torch Devices have a “Prize Viewer” feature that enables the player to view or “pre-reveal” that game result. Farley Decl. ¶¶ 4, 5,<sup>18</sup> Answer ¶ 48, MGC Tr. at 148:1-10.
- g. Use of the Prize Viewer feature is optional. Farley Decl. ¶¶ 4, 5, Prelim. Tr. at 48:14-24, MGC Tr. at 121:17-25.
- h. When the player chooses not to use the Prize Viewer feature, the Torch Device looks and plays substantially the same as a slot machine. MGC Tr. at 122:1-8, Prelim. Tr. at 51:13-22.
- i. Having learned the game result by using the Prize Viewer feature, the player can choose to either pay for that result or exit the game. Farley Decl. ¶ 5.

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<sup>18</sup> Mr. Farley’s declaration is inconsistent in its description of the Prize Viewer feature in that he refers to viewing “upcoming game outcomes” (plural) in paragraphs 4 and 9, while in paragraph 5 suggests the player can choose to “play for the outcome displayed” (singular). I have reviewed a configuration manual from the developer of the software used in the Torch Devices that describes how the Prize Viewer feature can be configured to display either multiple future prizes or only “the very next prize,” but I have no evidence that the Prize Viewer feature on the Torch Devices has ever been configured to display multiple prizes. Exhibit 10 at 2.

- j. In order to learn the result of the subsequent game, the player must first pay for the result indicated by the Prize Viewer.  
MGC Tr. at 148:11-22.
- k. Whether the player uses the Prize Viewer or not, the Torch Device provides an entertaining display of spinning reels.  
MGC Tr. at 23:2-19.
- l. The spinning reels do not determine the result of the game; that result is determined by the sequential selection from the predetermined finite sequence of results, and the player has no control over that selection. Farley Decl. ¶¶ 7, 8, MGC Tr. at 23:15-23.

57. Both of the following Torch Device gameplay examples assume that the player has at least 20 credits and the price to play is 10 credits. When the player chooses to use the Prize Viewer, the steps of gameplay are as follows:

- a. The Torch Device has already selected the game result for the next spin;
- b. The player presses the Prize Viewer to reveal the game result;
- c. The player presses Play, 10 credits are subtracted from the meter, and the entertaining display begins (usually reels begin to spin);

- d. The entertaining display ends and the game result is displayed and, if more than zero credits, added to the player's credit meter;
- e. The Torch Device selects the next game result; and
- f. The player can then either use the Prize Viewer, press Play without using the Prize Viewer, or cash out.

58. When the player chooses not to use the Prize Viewer, the steps of gameplay are as follows:

- a. The Torch Device has already selected the game result for the next spin;
- b. The player presses Play, 10 credits are subtracted from the meter, and the entertaining display begins;
- c. The entertaining display ends and the game result is displayed and, if more than zero credits, added to the player's credit meter;
- d. The Torch Device selects the next game result; and
- e. The player can then either use the Prize Viewer, press Play without using the Prize Viewer, or cash out.

59. In other words, the play of a Torch Device involves all the same steps (except for the Prize Viewer); the only difference is whether the player learns the result before or after the entertaining display.

**C. Torch Devices Enable a Player to Engage in “Gambling” as That Term is Defined in Mo. Rev. Stat. § 572.010(4)**

60. The definition of “gambling” under Mo. Rev. Stat. § 572.010(4) has several components, as follows:

61. A person engages in gambling when
- a. he or she stakes or risks something of value upon
    - i. the outcome of a contest of chance *or*
    - ii. a future contingent event not under his or her control or influence,
  - b. upon an agreement or understanding that he or she will receive something of value in the event of a certain outcome.

62. Notably, the definition of gambling under the Missouri statute does not require “a contest of chance” because it can also be satisfied by “a future contingent event not under [the player’s] control or influence.”

**1. Torch Devices Satisfy the “Future Contingent Event” Prong**

63. Defendants have admitted that a player can “win money” playing the Torch Devices, and the evidence indicates that a player may win or lose. Answer ¶ 44, Prelim. Tr. at 48:14-24, MGC Tr. at 23:2-9, 148:17-19.

64. Torch admits that “each outcome is pre-determined and sequential.”

Answer ¶ 47. Mr. Farley clarifies that “[t]he outcomes of the games and prizes awarded are instead based on predetermined finite outcomes that are in sequential order” and admits that “[n]either the operators nor the players have the ability to affect the game outcomes that are distributed from the finite pools.” Farley Decl. ¶¶ 7, 8. Therefore, as Mr. Farley’s declaration admits, revealing the next prize in a Torch Device is a “future contingent event not under [the player’s] control or influence.”

65. Thus, at least for any player who approaches a Torch Device when the Prize Viewer indicates a \$0 prize, the price to play the Torch Device is a stake or risk, not a bona fide purchase of the current \$0 prize in the Prize Viewer. The result of that stake or risk is revealed after the player has claimed the current \$0 “prize” and can use the Prize Viewer to reveal the next prize. An example using a \$1 price will serve to illustrate:

- a. If the Prize Viewer shows \$0 as the current “prize,” the player must pay \$1 to claim that \$0 “prize” and have the opportunity to reveal (and claim) the next prize. If the next “prize” is also \$0, the player’s initial stake of \$1 resulted in a loss. If the next prize is \$3 or greater, the player can then pay a second \$1 to claim the next prize and have the opportunity to reveal a third.



In that case, the player's initial stake of \$1 resulted in a net win of at least \$1. But before the player plays, the value of their \$1 wager is contingent on a future event: it equals \$0 plus the value of the not-yet-revealed next prize.

66. Of course, a \$0 "prize" has no value. Thus, in the case where a player approaches a Torch Device where the Prize Viewer shows a \$0 prize (or would show a \$0 prize if utilized), the player risks (wagers) his \$1 stake on the future contingent event that the second play of the Torch Device will reveal a winning outcome. The player must absorb the initial \$1 cost (because the first "prize" is \$0) in order to reveal the second prize, and the player knows in advance that the cost to claim that second prize is \$1, so the total cost to claim the second prize is \$2. As described above, if the second prize is at least \$3 then the player will have a net win, and if the second prize is \$0 the player will have a loss, but the player must pay the initial \$1 in order to reveal that outcome. Therefore the player's initial \$1 is wagered (risked or staked) on the outcome of that second play, which is outside that player's control or influence.

67. But even when a player approaches a Torch Device at a time when the Prize Viewer indicates a greater-than-\$0 prize (however rare that may be), that player too stakes money on a game based upon a future contingent event, as the following example illustrates:

- a. If the Prize Viewer shows \$5 as the current prize, the player must pay \$1 to claim that \$5 prize and have the opportunity to reveal (and claim) the next prize. If the next prize is \$0, the player's initial stake of \$1 resulted in a net win of \$4. If the next prize is \$2 or greater, the player can then pay a second \$1 to claim the next prize and have the opportunity to reveal a third. In that case, the player's initial stake of \$1 resulted in a net win greater than \$4. But before the player plays, the value of their \$1 wager is contingent on a future event: it equals \$5 plus the value of the not-yet-revealed next prize.

68. Thus, regardless of the prize amount indicated by the Prize Viewer (either \$0 or greater), the return on the player's initial \$1 is not determined until after the next prize is revealed. Therefore, in both scenarios, the player's initial \$1 is staked upon a future contingent event that is not under that player's control or influence.

**a. A Player Using a Torch Device Will Receive  
“Something of Value” In the Event of a Certain  
Outcome**

69. Torch has admitted that “if a player wins money, they can cash out.” Answer ¶ 44. The evidence indicates that the player can either win or lose. MGC Tr. at 23:5-9, Farley Decl. ¶ 8. The winning prizes received by the player are thus

“something of value” under Missouri law, which expressly defines that term to include “any money or property, any token, object or article exchangeable for money or property.” Mo. Rev. Stat § 572.010(12).

70. The opportunity to reveal the next prize and claim it is likewise “something of value.” Even though the player does not know what that next prize will be, there is a chance that prize will be a winner and not a loser. Thus, like free-bet coupons in casinos, or unscratched lottery scratch tickets, the ability to reveal and claim a prize in the Torch Devices is “something of value.”

71. Therefore, even when a player of the Torch Device uses the Prize Viewer every play, that player stakes or risks something of value (the monetary price to play) upon a future contingent event not under his or her control or influence (the unrevealed prize value for the next Torch Device outcome) upon an agreement or understanding that he or she will receive something of value in the event of a certain outcome (the monetary prize, in the event that next prize is a winner and the player pays the price to claim it).

## **2. Torch Devices Satisfy the “Contest of Chance” Prong**

72. Torch also admits that revealing the next outcome in a predetermined sequence of predetermined outcomes “clearly” involves an element of chance. Doc. 26 at 8. In doing so, Torch refutes its earlier argument that “use of predetermined finite outcomes that are in sequential order [is] one characteristic of

Torch Devices that eliminates ‘chance.’” Doc. 26 at 7. Of course, that was an incorrect position to begin with. Both the outcomes stored in the Torch Devices and lottery scratch tickets are predetermined finite outcomes in sequential order, but there is no dispute that lottery scratch tickets involve an element of chance. Therefore, merely using predetermined finite outcomes in sequential order is not sufficient to “eliminate[] chance” as alleged by Torch.

73. As above, Mr. Farley admits that the player of a Torch Device has no “ability to affect the game outcomes that are distributed from the finite pools.” Farley Decl. ¶ 7. That is equally true for lottery scratch tickets. Since sequentially revealing the next outcome in a sequence of predetermined finite lottery tickets “clearly” involves an element of chance, so does sequentially revealing the next outcome in a sequence of predetermined finite Torch Device outcomes, and both are examples of a “game ... in which the outcome depends in a material degree upon an element of chance.” Therefore, both lottery scratch tickets and Torch Device outcomes satisfy the definition of “the outcome of contest of chance” under Mo. Rev. Stat. § 572.010(3) and (4).

74. Just as nearly all slot machines do, the Torch Devices allow the operator to select a desired RTP or payback setting from a list of configurable options. In the configuration manual I have reviewed, the available settings for

“Payout %” are not actually quantified as percentages but are instead listed as Low, Medium, High and Highest.

## Configure Games



1. **Game** - Select the game you wish to configure using this drop box in the top left hand corner
2. **Is Active** - Turn the selected game on or off using the “Is Active” checkbox.
3. **Payout %** - Choose your desired payout % in the top right corner. Can be set to Low, Medium, High or Highest. The default is high.
4. **Play Amounts** - Turn On/Turn Off desired Play Amounts by pressing the on/Off button. A maximum of 5 play amounts is allowed per machine.
5. **Default** - sets the play amount that the game will default to.
6. **Master Volume** - This sets the max volume if turned all the way up.

Exhibit 10 at 2-3.

75. Thus, the configuration setting for Payout % is further evidence that the Torch Devices<sup>19</sup> are games of chance. Therefore, the Torch Devices depend in a material degree upon an element of chance (and to reiterate, as admitted by Mr. Farley, the player has no ability to affect the outcomes of a Torch Device).

76. Therefore, even when a player of the Torch Device uses the Prize Viewer every play, that player stakes or risks something of value (the monetary price to play) upon the outcome of a contest of chance (the unrevealed prize value for the next Torch Device outcome) upon an agreement or understanding that he or she will receive something of value in the event of a certain outcome (the monetary prize, in the event that next prize is a winner and the player pays the price to claim it).

**D. Torch Devices are “Gambling Devices” under Mo. Rev. Stat. § 572.010(5)**

77. As described herein, the evidence indicates that Torch Devices have been used by players to perform all of the following acts:

- a. Staking money;
- b. Initiating gameplay;
- c. Observing an entertaining display;

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<sup>19</sup> I understand that there are several different versions of the Torch Devices, including a version corresponding to Exhibit 10. MGC Tr. at 135:19-136:19.

- d. Revealing the result of the game without the ability to affect that result;
- e. Winning money;
- f. Losing money;
- g. Using winnings from prior plays to play again.

78. The definition of “gambling device” in Missouri includes any device or equipment that is “used or usable in the playing phases of any gambling activity.” The Missouri statute does not expressly define “the playing phases of any gambling activity.” However, playing a casino game such as a slot machine is a “gambling activity” in Missouri, and the player’s operation of a typical slot machine includes depositing money to buy credits, pressing a “bet” or “spin” button to initiate gameplay, observing the entertaining display, revealing the result (win or lose), in the case of a win observing the increase of credits, and using prior winning credits to make another play. All of those acts have also been performed by players of Torch Devices. Specifically, in my opinion, at least the step of initiating gameplay by staking credits, observing the entertaining display, and revealing the result are “playing phases” of a gambling activity. Therefore, the Torch Devices have in fact been used in the playing phases of a gambling activity.

79. Additionally, the Torch Devices are *usable* in the playing phases of a gambling activity. As an initial matter, when a player elects not to use the Prize

Viewer, or is unaware of the Prize Viewer feature, that player is using the Torch Device to gamble. The evidence indicates that without the Prize Viewer, a Torch Device plays “substantially the same as a slot machine” or “just like a slot machine.” MGC Tr. at 122:1-8, Prelim. Tr. at 51:13-22. The fact that the Torch Devices may draw their results from a sequence of predetermined outcomes does not alter that conclusion: as noted in my prior declaration and above, several jurisdictions require electronic gaming machines to rely on finite pools of predetermined outcomes just as the Torch Devices do, including tribal casino gaming machines in Washington State under Appendix X and video lottery terminals operated under New York State Lottery rules in New York. Such machines would, if operated in Missouri, satisfy the definition of “gambling device,” notwithstanding the fact they use predetermined outcomes. Thus, the Torch Devices are usable in the playing phases of gambling activity.

80. Also, I understand that the computer equipment inside the Torch Devices, as well as their physical components, can and have been converted by the manufacturer into “skill games” for use in other jurisdictions where the distinction between a game of skill vs. game of chance is based on a “predominance” test. However, Missouri uses a “material degree” test which means that a game that qualifies as a “game of skill” elsewhere may still qualify as a “contest of chance” in Missouri. To the extent a Torch Device can be converted to a “game of skill”



for use in another jurisdiction that would satisfy the criteria for a “contest of chance” in Missouri, that means the Torch Devices in Missouri are usable (by converting them) in the playing phases of that “game of skill” gambling activity under Missouri law. I reserve the right to further investigate the nature of the convertibility of Torch Devices and how they are (or have been) used in other jurisdictions.

**E. Torch Devices are “Slot Machines” under Mo. Rev. Stat. § 572.010(11)**

81. As described herein, the evidence indicates that Torch Devices have been used by players to perform all of the following acts:

- a. Inserting money;
- b. Revealing a prize selected by the game without the ability to affect that selection;
- c. Winning money;
- d. Redeeming the credit balance or cashing out.

82. The evidence indicates that Torch Devices can be operated as the result of insertion of a coin or other object (e.g., money), and can eject something of value (money).

83. I understand Torch argues that “the prize viewer function ... eliminates chance for each and every turn a player may choose to play.” Doc. 26 at 8. However, even if this were true (and I disagree that it is), the player may choose

not to use the Prize Viewer and thereby convert the Torch Device to a game where chance is not eliminated. Therefore, when the player does not use the Prize Viewer, the Torch Device operates as a result of the insertion of money, the game reveals an outcome, and depending on whether that outcome was a winning or losing outcome the game pays or does not pay a prize which may be ejected as money. In other words, if Torch were correct that the Torch Device is not a slot machine when the Prize Viewer is used, a player may readily convert the Torch Device into a slot machine simply by pressing the Play button before pressing the Prize Viewer button.

84. Torch has only argued with respect to single plays or turns of the Torch Devices. Farley Decl. ¶ 9, Answer ¶ 48. However, Torch also admits that the unknown results of one or more future plays is “luck of the draw (*aka* ‘chance’).” Doc. 26 at 8. When considering multiple plays (e.g., ten plays) of a Torch Device, the results of the 2<sup>nd</sup> through 10<sup>th</sup> play are unpredictable to the player at the time they insert money into the machine, even if they choose to use the Prize Viewer feature on the first play, and therefore depend on elements of chance. Similarly, when the player cashes out at the end of those ten plays, the value ejected depends on elements of chance.

85. The definition of “slot machine” further specifies that a device is not “any less a slot machine because apart from its use or adaptability as such it may

also sell or deliver something of value on a basis other than chance.” Thus, even if it were the case that it was possible for a player to use a Torch Device in such a manner that the role of chance was reduced or eliminated, it would be possible for another player (or even that same player) to use it in a manner that would involve an element of chance, and thus the Torch Device would still qualify as a “slot machine” as defined in the statute.

86. Also as discussed with respect to the definition of “gambling device,” to the extent the Torch Devices are readily adaptable or convertible for use in other jurisdictions (e.g., via software update) to use random number generators or other elements of chance beyond that which already exists in the Torch Devices as currently configured, the Torch Devices would satisfy the definition of “slot machine” for that additional reason. I reserve the right to further investigate the nature of the convertibility of the Torch Devices and how they are (or have been) used in other jurisdictions.

## **F. Other Topics**

### **1. Both of Mr. Farley’s Reasons Why “Chance Does Not Play A Role” in Torch Devices are Incorrect**

87. Mr. Farley’s declaration indicated two reasons that, in his opinion, “chance does not play a role” in the Torch Devices. One is that “the game outcomes are determined sequentially from the appropriate predetermined finite pool.” Farley Decl. ¶ 9. The other reason that “chance does not play a role” in the

Torch Devices is that “the ‘Prize Viewer’ feature will always have the game outcomes available to be displayed to the player if the player chooses to use that feature.” Farley Decl. ¶ 9. Neither of these reasons is sufficient, whether on their own or in combination, to establish the proposition that “chance does not play a role” in the operation of the Torch Devices.

88. First, Mr. Farley does not argue that “chance does not play a role” when a player does *not* use the Prize Viewer feature. Indeed, because the evidence indicates that a Torch Device behaves just like a slot machine when a player declines to use (or does not know about) the Prize Viewer feature, I presume Mr. Farley would agree with my opinion that chance does indeed play a role for those players. Certainly he has not explained how the mere *availability* of a Prize Viewer feature could by itself eliminate all chance from the game, without that feature being *used*.

89. Moreover, Mr. Farley failed to address how the “finite pool” of predetermined outcomes was sequentially arranged in the first place. If the finite pool was randomly shuffled before being stored in the Torch Device, or even if it was manually ordered by a software engineer at the manufacturer, that sequential ordering is unpredictable to the player, making it an element of chance. That ordering is also entirely outside the player’s control or influence – just as is true for lottery scratch tickets.

90. Moreover, Mr. Farley also failed to address where in that sequence the player begins play. Unless every outcome in the finite pool is identical (which they are not because the player can both win and lose), some starting positions in the sequence necessarily have greater short-term results than others, and conversely some positions have worse short-term results. Therefore, the player's short-term results over the next few plays are unpredictable to the player, making them an element of chance. Those short-term results also may vary depending on where in the sequence the player started to play, which is entirely outside of the player's control or influence – just as is true for lottery scratch tickets.

## **2. The Prize Viewer Function Does Not “Eliminate Chance”**

91. Torch has also argued that “the prize viewer function of a Torch device ... eliminates chance for each and every turn a player may choose to play.” Doc. 26 at 8. I disagree. As noted above, the play of the Torch Devices when the Prize Viewer is used involves claiming a prize and also revealing a next, previously-unrevealed prize, which means the next play involves claiming that previously-unrevealed prize. If nothing else, the Prize Viewer simply pushes the element of chance one play into the future.

92. Torch has admitted that lottery scratch tickets involve chance. Torch has also indicated that a scratch ticket equivalent of the Prize Viewer feature would be “the retailer selling lottery scratch-off tickets that allow the prospective player

to look at the ticket and know both whether that particular card will win and the amount that will be won.” Doc. 26 at 7. But Torch did not actually address that hypothetical, and it is plainly possible for a retailer to pre-scratch the next ticket in a roll of lottery scratch tickets before selling it.

93. Of course, the mere possibility of the next ticket being pre-scratched does not eliminate chance if that next ticket is not actually pre-scratched, and Torch cannot argue otherwise without contradicting its admission that lottery tickets involve chance. So it is with the Torch Devices: the mere possibility of the next result being pre-revealed does not eliminate chance if the next result is not actually pre-revealed.

94. But more fundamentally, the selection of an outcome in a Torch Device is “luck of the draw,” no different than lottery scratch tickets, so every outcome selection in a Torch Device (or lottery scratch ticket) is based on chance regardless of when it occurs. Revealing an outcome determined by a chance-based process does not retroactively eliminate chance from the process of determining that outcome.

95. Therefore, the pre-reveal or Prize Viewer feature does not “eliminate chance,” the Prize Viewer feature just reveals a chance-based outcome. A Prize Viewer feature could just as easily be applied to a slot machine with an internal random number generator as to a lottery scratch ticket or Torch Device. In fact, a

Prize Viewer on an RNG-based, Las Vegas-style slot machine could be presented identically to the Prize Viewer on the Torch Devices: after each play is over, the game's internal RNG would generate a random result for the next play, and that next result can then be revealed either by pressing a Prize Viewer button or by skipping the Prize Viewer and spinning the reels to correspond to that randomly-generated result. Presumably Torch would not suggest that the Prize Viewer somehow "eliminates chance" from that slot machine when every result was randomly generated, nor argue that a slot machine ceases to be a "slot machine" under Missouri law if it has a Prize Viewer feature. But should Torch make those arguments, I reserve the right to respond.

## **VII. CONCLUSION AND RESERVATION OF RIGHTS**

96. Based upon my investigation to date, I have reached and am prepared to testify to the following conclusions based upon my expertise and my analysis:

- (1) the Torch Devices allow a player to stake "something of value" upon the outcome of "a contest of chance," defined as "any contest, game, gaming scheme or gaming device in which the outcome depends in a material degree upon an element of chance, notwithstanding that the skill of the contestants may also be a factor therein";

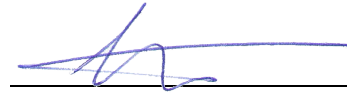
- (2) the Torch Devices allow a player to stake “something of value” upon the outcome of a “future contingent event not under his or her control or influence”;
- (3) the Torch Devices are “usable in the playing phases of any gambling activity, whether that activity consists of gambling between persons or gambling by a person with a machine”;
- (4) the Torch Devices have in fact been used “in the playing phases of any gambling activity”;
- (5) the Torch Devices, “as a result of the insertion of a coin or other object, operate[], either completely automatically or with the aid of some physical act by the player, in such a manner that, depending upon elements of chance, [they] may eject something of value”;
- and
- (6) the Torch Devices are “constructed or readily adaptable or convertible” to the use described in (5) above based upon a “mechanical act of manipulation.”

97. This report presents my opinions to date. As additional data, information, testimony, or expert reports from the various defendants become available to me or are provided to me, I may consider this information and I may find it appropriate to revise or supplement my analysis, opinions, and conclusions.



Thus, I reserve the right to modify or supplement this report and the opinions contained herein.

Submitted this 6<sup>th</sup> day of November, 2023.



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Stacy Friedman